## (19) World Intellectual Property Organization International Bureau

28 October 2004 (28.10.2004)



*55*3676

(43) International Publication Date

**PCT** 

(10) International Publication Number WO 2004/092411 A1

(51) International Patent Classification7:

\_\_\_\_

C12Q 1/68

(21) International Application Number:

PCT/EP2004/002809

(22) International Filing Date: 18 March 2004 (18.03.2004)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

03/04835

17 April 2003 (17.04.2003) FR

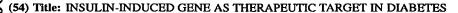
- (71) Applicants (for all designated States except US):
  MERCK PATENT GMBH [DE/DE]; Frankfurter Strasse
  250, 64293 Darmstadt (DE). CENTRE NATIONAL
  DE LA RECHERCHE SCIENTIFIQUE (C.N.R.S.)
  [FR/FR]; 3, rue Michel Ange, F-75016 Paris (FR).
- (72) Inventors; and
- (75) Inventors/Applicants (for US only): ASFARI, Maryam [FR/FR]; 94, rue Pierre Curie, F-91600 Savigny sur Orge (FR). COFFY, Sandrine [FR/FR]; 36 bis, rue de la Montagne, F-91380 Chilly Mazarin (FR).
- (74) Common Representative: MERCK PATENT GMBH; Frankfurter Strasse 250, 64293 Darmstadt (DE).

- (81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.
- (84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

## Published:

with international search report

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.



(57) Abstract: The present invention relates to the use of a modulator of the expression or activity of the E21G4 gene for the treatment of diabetes or its complications, obesity or insulin resistance, to a method of screening compounds useful in the treatment of these pathological conditions, and to a method for the diagnosis or prognosis of these pathological conditions.